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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,606	07/18/2003	Thomas F. Wilton	108322.02	2432
25944	7590	06/17/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			ROYAL, PAUL	
			ART UNIT	PAPER NUMBER
			3611	
DATE MAILED: 06/17/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/621,606	Applicant(s) WILTON ET AL. JL	
	Examiner Paul Royal	Art Unit 3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9-12, 17-21, 26-30 is/are rejected.
- 7) ☒ Claim(s) 5-8 and 13-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>07/18/03, 12/18/03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 18 July 2003 and 12 December 2003 has been considered by the examiner.

Double Patenting

2. Claims 1-4, 9-12, are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, 19-22, respectively of U.S. Patent No. 6,622,804.

Schmitz et al. '804 teaches a hybrid electric vehicle and method for controlling the vehicle as claimed by the instant invention except wherein the motor powers the vehicle from an element identified as an energy storage system.

Schmitz et al. '804 teaches the motor powers the vehicle from a battery array to reduce the load applied to the internal combustion engine/generator, fuel cell, turbine or other electrical power source. Where the instant invention claims an "energy storage system", the battery array of Schmitz et al. is understood to be the same as the energy storage system because battery arrays are commonly used to store energy.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the hybrid electric vehicle and method for controlling the vehicle as recited in claims 1-4, 9-12, to use the battery array as an energy storage system, as

taught by Schmitz et al. '804, to reduce the load applied to the internal combustion engine/generator, fuel cell, turbine, or other electrical power source.

3. Claims 17-21, 26-30, and 34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 20-24, and 39 respectively of U.S. Patent No. 6,483,198.

Schmitz et al. '198 teaches a hybrid electric vehicle and method for controlling the vehicle as claimed by the instant invention except wherein the motor powers the vehicle from an element identified as an energy storage system.

Schmitz et al. '198 teaches the motor powers the vehicle from a battery array to reduce the load applied to the internal combustion engine/generator, fuel cell, turbine or other electrical power source. Where the instant invention claims an "energy storage system", the battery array of Schmitz et al. is understood to be the same as the energy storage system because battery arrays are commonly used to store energy.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the hybrid electric vehicle and method for controlling the vehicle as recited in claims 17-21, 26-30, and 34, to use the battery array as an energy storage system, as taught by Schmitz et al. '198, to reduce the load applied to the internal combustion engine/generator, fuel cell, turbine or other electrical power source.

In summary, although the conflicting claims are not identical, they are not patentably distinct from each other because the energy storage system of the instant

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application is understood to be obvious in light of the battery array of U. S. Patent No. 6,622,804 and U.S. Patent No. 6,483,198, as applied below.

Allowable Subject Matter

4. Claims 22-25 and 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

For claims 22-25 and 31-33, the prior art does not teach a method for adaptively controlling a hybrid electric vehicle as recited in the independent claim and as applicable to the relevant dependent claims, the method including specific operational functions performed in conjunction with determining a zone of reduced emissions, turning off the energy generating system before entering the zone, maintaining the energy generating system in an off mode as required while the vehicle is propelled the zone and turning on the energy generating system after the vehicle leaves the zone.

5. Claims 5-8 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

For claims 5-8, the prior art does not teach a method as recited in claim 1 including mode, fault, or energy level monitoring as recited in the applicable dependent claim.

For claims 13-16, the prior art does not teach a vehicle wherein the controller operates as recited in claim 9 including mode, fault, or energy level monitoring as recited in the applicable dependent claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rosen et al. teaches a hybrid power system. Schmitz et al. '675 teaches a method for controlling in a hybrid vehicle. Schmitz et al. '620 teaches a method for controlling in a hybrid vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Royal whose telephone number is 703-308-8570. The examiner can normally be reached on 8:30-4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley D. Morris can be reached on 703-308-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



P. Royal
6/14/2004

Paul Royal
Examiner
Art Unit 3611



LESLEY D. MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600